



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,355	12/05/2003	Stephen William Watson Michnick	Oddy 004CIP1	2697
7590		03/12/2007		
Isaac A. Angres Suite 301 2001 Jefferson Davis Highway Arlington, VA 22202			EXAMINER LIU, SUE XU	
			ART UNIT 1639	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/728,355	WATSON MICHNICK ET AL.	
	Examiner	Art Unit	
	Sue Liu	1639	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21, 24-33 and 37 is/are pending in the application.
- 4a) Of the above claim(s) 6, 7, 9, 10, 15, 16, 18, 19 and 25-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8, 11-14, 17, 20, 21, 24, 30-33 and 37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Status

1. Claims 22, 23, 29 and 34-36 have been cancelled as filed on 12/4/06;
Claims 1-21, 24-33 and 37 are currently pending;
Claims 6, 7, 9, 10, 15, 16, 18, 19, and 25-28 have been withdrawn;
Claims 1-5, 8, 11-14, 17, 20, 21, 24, 30-33 and 37 are being examined in this application.

Election/Restrictions

2. Applicant's election with traverse of Group I (claims 1-5, 8, 11-14, 17, 20-24, 29-33 and 37) in the reply filed on 5/8/06 is as previously acknowledged.
3. This application contains claims 6, 7, 9, 10, 15, 16, 18, 19, and 25-28 drawn to an invention nonelected with traverse in in the reply filed on 5/8/06. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Sequence Rule Compliance

4. Applicant's amendment to the specification (filed on 12/4/06) to include proper Sequence Identifiers is acknowledged.

Priority

5. This application appears to be a CIP of U.S. Patent Application Nos. 09/603,885 (filed 6/26/2000), which is now a US PATENT, 6,897,017 (5/24/2005). The US PATENT, 6,897,017 is a CIP of US Patent Application Nos. 09/017,412 (filed 2/02/1998), which is now a US PATENT, 6,270,964 (8/7/2001). This application also claims priority to U.S. Provisional Patent Application Nos. 60/141,210, filed 6/26/1999.

Specification

6. It is noted that a revised Abstract was NOT filed by applicants.

As stated in the previous office action, applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Objections/Rejections Withdrawn

7. In light of applicant's amendment to the claims and cancellation of claims, the following claim objection is withdrawn:

A.) Claims 29-33 and 37 are objected to because the said claims depend on non-elected claims. Appropriate correction is required.

Art Unit: 1639

B.) Claims 2, 4, 5, 8, 12-14, 17, 21-24, 29-33, and 37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. In light of applicant's filing of Terminal Disclosure (filed 12/4/06), the following rejection is withdrawn:

A.) Claims 1-5, 8, 11-13, 14, 17, 21-24, and 29-33 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 7, 9-22, 32, 33, 36-38, and 40 of U.S. Patent No. 6,270,964 B1.

Claim Rejections Maintained

Claim Rejections - 35 USC § 112

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Written Description Rejection

10. Claims 1-5, 8, 11-14, 17, 20, 21, 24, 30-33 and 37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The previous rejection over claims 1-5, 8, 11-14, 17,

Art Unit: 1639

20, 21, 24, 30-33 and 37 is maintained for the reasons of record as set forth in the Office action, mailed 7/12/06, at pp. 6+. The previous rejection over Claims 22, 23 and 29 is moot due to applicant's cancellation of the said claims.

Discussion and Answer to Argument

11. Applicant's arguments have been fully considered but they are not persuasive for the following reasons (in addition to reasons of record). Each point of applicant's traversal is addressed below (applicant's arguments are in italic):

Applicants argue that the amendment to the claims is sufficient to overcome the above said rejection. (Reply, 12/4/06, p. 15, para 1).

However, the amendment to the claim is not sufficient to overcome the rejection as set forth in the previous office action. The instant claims are broadly drawn to a genus of "proteins" as well as a genus of "fluorescent protein reporter molecule". The instant claims are also drawn to a genus of method of fusing the various fragments of the "fluorescent protein reporter molecule" to the genus of "proteins". Neither the instant specification nor the claims demonstrate common core structure or a representative number of species for the claimed genres.

To provide evidence of possession of a claimed genus, the specification must provide sufficient distinguishing identifying characteristics of the genus. The factors to be considered include disclosure of complete or partial structure, physical and/or chemical properties, functional characteristics, structure/function correlation, methods of making the claimed product, or any combination thereof. (see MPEP 2163 II).

In this case, the instant application did not provide distinguishing identifying characteristics for the claimed genres of "fluorescent protein reporter molecule", and

Art Unit: 1639

“proteins”. The instant disclosure only provides one example of a “fluorescent protein reporter molecule”, Green fluorescent protein (GFP), which is not sufficient to represent the entire claimed genus of “fluorescent protein reporter molecule”. The structure of GFP is unique as reflected by its crystal structure (see instant spec., pp. 17-18). Furthermore, the claimed method depends on designing the right “fragments” to fuse with various proteins, which designing in turn depends on the known crystal structure of the fluorescent protein, as stated in the instant specification (p. 18, lines 1+).

However, the instant specification does not provide any structural (crystal) knowledge for any other “fluorescent protein reporter molecule”, and any common structure for their corresponding “fragments” that can be fused with any protein.

In addition, the instant specification also does not provide for a common core structure or a representative number of species for the claimed genus of proteins that can be used to fuse with the “fluorescent protein reporter molecule”.

Therefore, applicants are not in possession of the claimed entire genus of “fluorescent protein reporter molecule” and the entire genus of “proteins” that can be fused with the reporter molecule fragments. Applicant’s claimed scope represents only an invitation to experiment regarding possible reporter molecules that might be properly fragments and fused with various proteins for the purpose of detecting interactions.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 1639

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sue Liu whose telephone number is 571-272-5539. The examiner can normally be reached on M-F 9am-3pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Schultz can be reached at 571-272-0763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JON EPPERSON
PRIMARY EXAMINER

SL
Art Unit 1639
2/28/2007

